

Low-cost Li-Ion battery charger demonstration board based on the ST7263BK6 and L6924D

Data brief

Features

- Can be used both in USB mode and adapter mode
- Consists of a charger section based on the L6924 for charging a Li-Ion / Li-polymer battery, and an action control section using the ST72F63BK6M1 microcontroller
- Uses LEDs to indicate the charging condition status
- Includes an ICC connector for programming the microcontroller
- RoHS compliant

Description

The STEVAL-ISB005V1 demonstration board is a standalone Li-Ion/ Li-polymer battery charger, which can be powered either by USB or by an external DC adaptor. The ST72F63BK6M1 microcontroller is used for USB enumeration and to control the SD pin of the L6924.

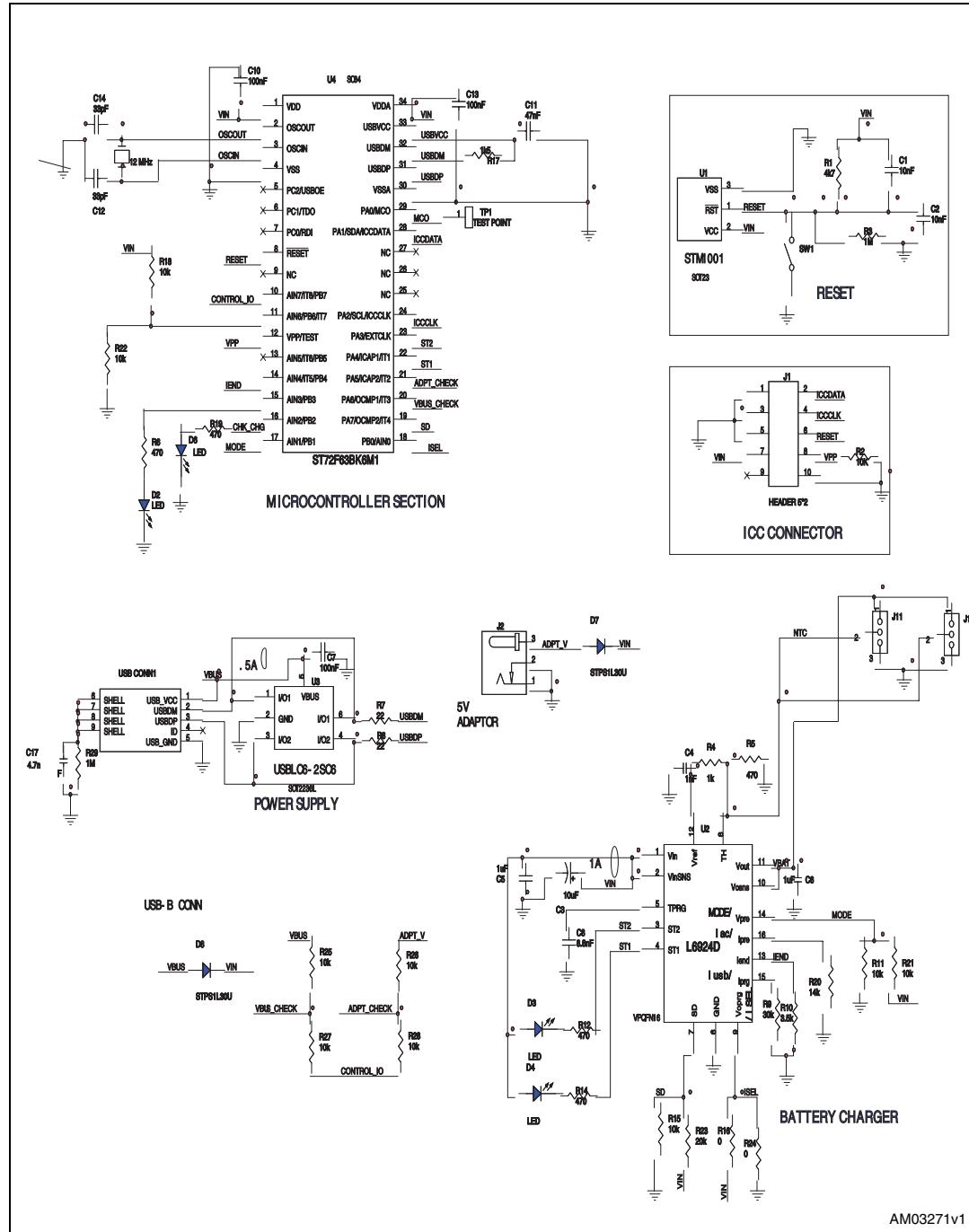
In USB mode, the battery-charging current complies with high-power USB device specifications. The L6924 is powered by 5 V from the USB, thus charging the battery also by USB.

A general-purpose adaptor socket is also available for use when external power is available. In this case, the L6924 operates completely independent of the microcontroller.



1 Schematic diagram

Figure 1. STEVAL-ISB005V1 USB system schematics



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
21-Nov-2008	1	Initial release.
25-Feb-2010	2	Updated features on cover page.
09-Jun-2010	3	Modified title on cover page.

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